

AMENDMENTS TO THE CLAIMS:

This listing of claims replaces all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (Currently Amended) A method of measuring transmission characteristics of radio channels in a radio communications system having ~~a number of~~ base stations and a radio station, the radio communications system utilizing a timeslot structure in a time frame for transmitting data, the method comprising:

transmitting the data as bursts from one of the base stations to the radio station, each burst having a channel measurement sequence, the one of the base stations transmitting the channel measurement sequence in at least one timeslot in which no data is transmitted from the one of the base stations to ~~a~~ the radio station.

2. (Currently Amended) The method ~~as claimed in~~ of claim 1, wherein the channel measurement sequence is transmitted using at least one of (i) a constant power level and (ii) a number of base stations transmitting at the same time.

3. (Previously Presented) The method of claim 1, wherein the channel measurement sequence is transmitted in the middle of a burst.

4. (Previously Presented) The method of claim 1, wherein the base stations are synchronized.

5. (Previously Presented) The method as claimed in claim 4, wherein cyclic correlation is used for channel measurement.

6. (Currently Amended) The method ~~as claimed in~~ of claim 5, wherein individual base stations use a same channel measurement sequence.

7. (Currently Amended) The method ~~as claimed in~~ of claim 6, wherein the channel measurement sequence is transmitted with a different code phase by different base stations.

8. (Currently Amended) The method of claim 1, wherein a channel measurement sequence in a predetermined timeslot in the time frame has ~~a special~~ an identifier.

9. (Currently Amended) The method ~~as claimed in~~ of claim 8, wherein a same channel measurement sequence is used in the predetermined timeslot as is used in other time slots in the time frame, and wherein phase modulation is used in the channel measurement sequence in the predetermined timeslot.

10. (Currently Amended) The method ~~as claimed in~~ of claim 9, wherein 180° phase modulation of the channel measurement sequence is used in the predetermined timeslot from one time frame to a next time frame.

11. (Currently Amended) The method ~~as claimed in one of claims~~ of claim 8, wherein the predetermined timeslot is a 0-th timeslot.

12. (Previously Presented) A radio communications system having a number of base stations and at least one radio station which uses the method of claim 1.

13. (Currently Amended) The radio communications system ~~as claimed in~~ of claim 12, wherein the radio communication system is a TDD radio communication system.

14. (Currently Amended) The radio communications system ~~as claimed in~~ of claim 12, wherein the radio communication system is a FDD radio communication system.